



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,325	02/24/2004	Robert A. Costa		2639

7590
Robert A. Costa
17 Tanner Lane
Fairhaven, MA 02719

04/30/2007

EXAMINER

HUYNH, CONG LAC T

ART UNIT	PAPER NUMBER
----------	--------------

2178

MAIL DATE	DELIVERY MODE
-----------	---------------

04/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,325

Applicant(s)

COSTA ET AL.

Examiner

Cong-Lac Huynh

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: the application filed on 2/24/04.
2. Claims 1-30 are pending in the case. Claims 1, 8, 15, 20, 26-27 are independent claims.

Claim Objections

3. Claim 6 is objected to because of the following informalities: the "claim 6" (line 1) is a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claim 1, the claimed limitations are confusing since in step receiving the description of the document is generated responsive to the specification (lines 7-8), where the specification refers to a specification of the document in the first format. Therefore, it is not sure that when importing the document in the second format into the data store responsive to the description, this description of the document is for the first format or is for the second format.

Independent 8 is also rejected under the same rationale.

Dependent claims 2-7, 9-14 are rejected for fully incorporating the deficiencies of their base claims 1 and 8.

Also, regarding claim 6, the dependency of the claim is improper when claiming "the method of claim 6" since it is not sure what claim claim 6 is dependent on.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-3, 7-9, 13-14, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Schoenberg (US 2004/0111297, 6/10/04, filed 12/10/02).

Regarding independent claim 1, Schoenberg discloses:

- supplying the document in the first format and a specification comprising instructions for creating a description of the document based on attributes of the document and syntax rules for the description (figure 2, [0034]-[0035]: paper document of a patient, which is the document in the first format, is provided with optical token including instructions of creating a description of the document)
- receiving the document in the second format ([0034]-[0035]: the patient document in electronic form, which is the second format, is received in the data store; [0023]: the host server receives the electronic form, which is the second format, of the document)
- receiving a description of the document generated responsive to the specification (figure 2, [0023]: the token of the document generated responsive to the data related to the document)
- importing the document in the second format into the data store responsive to the description (figure 2, #224: insert documents into patient file as instructed by token; [0023], [0034]: entering the electronic form of the document into the electronic data store based on the destination instructions)

Art Unit: 2178

Regarding claim 2, which is dependent on claim 1, Schoenberg discloses that the attributes of the document include at least one of the creation date of the document, the source of the document, content contained in the document and the location of the document on a storage medium ([0023], [0021]: attributes of the document includes content contained in the document).

Regarding claim 3, which is dependent on claim 1, Schoenberg discloses receiving the document in the second format and the description of the document as part of a batch file also containing a plurality of other documents in the second format and associated description of the plurality of other documents, wherein the other documents in the second format are configured to be imported into the data store responsive to the associated description of the other documents in the second format ([0021], [0023]: a plurality of documents in electronic form with associate token are received by the host server system where the electronic form, which is the second format, are formed in response to the instructions of the token).

Regarding claim 7, which is dependent on claim 1, Schoenberg discloses that the document in the first format comprises a paper document, and the document in the second format comprises an electronic file [0021], [0023], [0034]-[0035]).

Claims 8-9, 13-14 are for a system for method claims 1-3, 7 and are rejected under the same rationale.

Claim 26 is for a computer program product of method claims 1, 5-6, and is rejected under the same rationale.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 4-6, 10-12, 15-25, 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoenberg as applied to claim 1 above, and further in view of Aridor et al. (US 2004/0215650, 10/28/04, filed 10/11/02).

Art Unit: 2178

Regarding claim 4, which is dependent on claim 1, Schoenberg does not disclose indexing the document imported into the data store based on indexing data contained in the description.

Aridor discloses indexing the document imported into the data store based on indexing data contained in the description (figure 14, [0107]-[0108]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg since Aridor provides indexing the documents stored in the file system thus motivating to incorporate the indexing feature into the data store containing electronic documents converted from the paper documents to easily keep track documents in the data store as well as quickly retrieve a requested document from the data store.

Regarding claim 5, which is dependent on claim 1, Schoenberg does not disclose that the specification comprises an XML Document Type Definition that describes element names and XML syntax rules for creating a description of the document.

Aridor discloses that the specification comprises an XML Document Type Definition that describes element names and XML syntax rules for creating a description of the document ([0108], [0110]-[0112]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg for using XML DTD for creating a description of the document in XML, a language flexible for creating documents, so that

the document in paper format can be effectively described how it will be in electronic form.

Regarding claim 6, which is dependent on claim 1, Schoenberg does not disclose that the description comprises a well-formed XML document file generated responsive to the XML Document Type Definition.

Aridor discloses that the description comprises a well-formed XML document file generated responsive to the XML Document Type Definition ([0110]-[0114]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg for obtaining a description of a paper document in XML form according to a DTD providing the specific syntax for presenting the paper document in an electronic form.

Claims 10-12 are a system for method claims 4-6, and are rejected under the same rationale.

Regarding independent claim 15, Schoenberg discloses:

- receiving the electronic files and the descriptions of the files, the descriptions descriptive of attributes of the electronic files and generated responsive to a specification comprising instructions for describing the files and syntax rules for the descriptions ([0034]-[0035]: the electronic files with the tokens are stored in the data store implies that the electronic files and their descriptions are received

where the tokens include instructions instructing how the documents are rendered)

- locating the electronic files on a storage medium based on the information contained within the descriptions ([0038]: locating the document in the data store via the token of the document)
- copying the electronic files into the data store (figure 2: insert documents into patient files, [0023]: enter the electronic documents into the data store shows the claimed copying)

Schoenberg does not disclose:

- extracting indexing data associated with the electronic files from the descriptions of the electronic files
- indexing the electronic files in the data store responsive to the indexing data extracted from the descriptions of the electronic files

Aridor discloses:

- extracting indexing data associated with the electronic files from the descriptions of the electronic files ([0032]-[0034], [0042]: extracting data from the index responsive to the specification)
- indexing the electronic files in the data store responsive to the indexing data extracted from the description of the electronic files ([0032], [0107]-[0108])

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg since Aridor provides indexing the documents stored in the file system based on the descriptions of the electronic files thus

Art Unit: 2178

motivating to incorporate the indexing feature into the data store containing electronic documents to easily keep track documents in the data store as well as quickly retrieve a requested document from the data store.

Regarding claim 16, which is dependent on claim 15, Schoenberg does not disclose creating references in an index to the electronic files in the data store responsive to the indexing data to enable subsequent access to the files by a user application using the index.

Aridor discloses creating references in an index to the electronic files in the data store responsive to the indexing data to enable subsequent access to the files by a user application using the index ([0108], [0114]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg for quickly accessing to the files and subsequently accessing the files using the index of the files in the data store.

Regarding claim 17, which is dependent on claim 15, Schoenberg discloses receiving the electronic files and the descriptions of the files in the form of the single batch (figure 2: documents and token in a single batch when sent and are received and inserted into patient file at the host server).

Art Unit: 2178

Regarding claim 18, which is dependent on claim 15, Schoenberg does not disclose indexing the electronic files in the data store responsive to batch-level indexing data extracted from the description of the electronic files.

Aridor discloses indexing the electronic files in the data store responsive to batch-level indexing data extracted from the description of the electronic files ([0040]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg for quickly retrieving a document in request based on the indices of the electronic files in the data store.

Regarding claim 19, which is dependent on claim 15, Schoenberg does not disclose:

- locating valid indexing data about the electronic files contained in the descriptions responsive to the syntax rules in the specification
- extracting valid indexing data from the description
- outputting the valid indexing data to the data store

Aridor discloses:

- locating valid indexing data about the electronic files contained in the descriptions responsive to the syntax rules in the specification (0033)-(0034):
extracting a document identifier from one of the posting of the values where these data is included in the index implies that the claimed locating is performed so that said valid indexing data can be extracted)

Art Unit: 2178

- extracting valid indexing data from the description (0033)-[0034], [0042]:
extracting a document identifier from one of the posting of the values where
these data is included in the index)
- outputting the valid indexing data to the data store [0032]: displaying the index of
the data in the repository)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Aridor into Schoenberg for providing a way to quickly retrieve a requested document via the displayed index of data of the repository where the index data extracted from the descriptions of the documents.

Claims 20-25 are for an apparatus of method claims 15-19, and are rejected under the same rationale.

Claims 27-30 are for a computer program product of method claims 15-16, 18-19, and are rejected under the same rationale.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Skeen et al. (US 2003/0088543). Dieberger et al. (US 2003/0122873).

Tosswill et al. (US 2004/0002919). Boonen (US 2004/0083430).

Houle et al. (US 2004/0143464). Zuniga et al. (US 2004/0205481).

Art Unit: 2178

Ethier et al. (US 2004/0199876). Fujishima et al. (US 6,829,814).

Bebo et al. (US 2005/00553373). Yoshida (US 2005/0132278).

Gopalasamy (US 2006/0139691).

Newman et al., A Desk Supporting Computer-based Interaction with Paper Documents, ACM 1992, pages 587-592.

Guimbretiere, Paper Augmented Digital Documents, ACM 2003, pages 51-60.

Grasso et al., Augmenting Paper to Enhance Community Information Sharing, ACM 2000, pages 51-62.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 571-272-4125. The examiner can normally be reached on Mon-Thurs (9:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2178

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cong-Lac Huynh
Primary Examiner
Art Unit 2178
4/23/07